

ABSTRACT

A high density probe card contact apparatus including a support block fitted into an opening in a probe card, and holding a plurality of fine tipped needles extending inward and below an opening in the center of the block. The needle tips are a noble metal integrally connected with a less costly conductive metal which forms the more widely spaced fingers of the needles, and which terminate in contacts to the probe card. Laser etching defines the fine needle pattern in a thin sheet of the two-metal composition which is secured to a polymeric film. The contact apparatus is assembled by positioning one or more sections of the polymer with needles on the support film.